CalPERS
Investment Office
P.O. Box 2749
Sacramento, CA 95812-2749
Telecommunications Device for the Deaf - (916) 795-3240
(916) 795-3400

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AGENDA ITEM 4b

TO: MEMBERS OF THE INVESTMENT COMMITTEE

I. SUBJECT: Environmental Programs Update

II. PROGRAM: CalPERS Total Fund

III. RECOMMENDATION: Information

IV. ANALYSIS:

In 2004, the CalPERS Investment Committee launched an environmental investment initiative that spanned several asset classes (Real Estate, Private Equity, and Global Equity), as well as Corporate Governance. This initiative, as well as subsequent programs and activities, recognized that environmental and sustainability issues, including climate risk, create material risks and opportunities for the investment portfolio, and that these factors should be taken into account, consistent with fiduciary duty, in the management of the portfolio.

In the past, staff has reported separately on its various environmental initiatives and activities. This is the first annual update that reports across the entire portfolio.

This agenda item provides a written summary of the various environmental programs and initiatives. At the November 17, 2008 Investment Committee meeting, staff will present its report and be available to answer questions. PCG Asset Management, our private equity clean technology partner, will also be available.

INVOLVEMENT IN INVESTOR AND STAKEHOLDER GROUPS

CalPERS Investment Committee members as well as staff represent CalPERS and are involved in a variety of institutional investor and stakeholder groups whose missions include integrating environmental sustainability into capital markets and incorporating environmental disclosure into investment decision-making and ownership practices.

CalPERS is represented on the boards of Ceres and the United Nations Principles for Responsible Investment (UN PRI). In addition, Committee members and staff are active participants in a number of other coalitions and groups including the UN Environmental Programme Financial Initiative, the Investor Network on Climate Risk, the Global Warming Shareholder Campaign, and various working groups within the UN PRI.

REAL ESTATE

ENERGY EFFICIENCY GOAL: 2007 REPORT

History

In December 2004, the Investment Committee adopted a voluntary Energy Efficiency Goal that proposed a 20 percent energy reduction in the Core real estate portfolio over a five-year period subject to an appropriate cost benefit analysis. Staff submitted annual reports to the Investment Committee in 2005 and 2006 noting progress made toward the goal.

In 2007, Staff hired JDM Associates to report 2007 reduction in energy consumption, to determine best units of measure and reporting standards, establish baseline years of energy consumption, and to review prior years' reporting based on their recommended calculation measurements and methodology. The JDM Associates report is Attachment 1.

Calculation and Methodology

The following are important considerations when refining and reporting energy consumption data in CalPERS Real Estate portfolio:

- The portfolio is very large, diverse and dynamic
- Multiple property types
- Sample size varies annually
- Only a small portion of the portfolio has remained constant since 2004

Although controls for these issues were created, the aggregate energy consumption reduction for the portfolio should be considered a representative, rather than an absolute, measure of partners' energy efficiency improvements.

Core investment partners responded to a survey requesting energy consumption data for all properties they owned with CalPERS during the calendar year 2007. Based on the data provided by partners, the energy reduction was calculated on a per-square-foot basis using metrics appropriate to each property type:

- Office – total energy usage per occupied net rentable square foot
- Multifamily, industrial, and retail – common area energy usage per net rentable square foot

Using these measures, 2007 data is compared with energy usage data for 2004 (the baseline year), 2005, and 2006. The previously reported 2005 and 2006 energy reductions were recalculated based on this methodology to provide reasonable comparisons. In addition, inconsistencies in previous years' calculations and data were corrected (refer to Attachment 1 for additional information on this issue). To calculate the total energy reduction, kWh were converted to Btu so that they could be combined using a common denominator.

2007 Energy Efficiency Goal Results

The analysis of the 2007 data revealed a 13.3 percent reduction in energy consumption when compared to 2006 data. Compared with the 2004 energy consumption baseline, the weighted total reduction in overall energy consumption was 12.5 percent. The overall consumption is less than the annual consumption due to a slight increase in energy consumption in 2005. This increase is explained in detail in the JDM report.

Our investment partners are largely on track to meet the Investment Committee's Energy Efficiency goal of 20 percent energy consumption reduction by 2009.

Past and Continuing Approach

There has been an increase in environmental consciousness as partners strive to enhance sustainability across their portfolios. All partners recognize the importance of an industry shift toward environmentally sensitive real estate operations, management, and development. CalPERS partners are in the process of making sustainability a top priority. They continue to explore and implement cost-effective strategies to achieve CalPERS environmental objectives.

All Core and Non-Core partners whose information was included in the analysis were given the opportunity to review the Environmental Initiative Update report. Partners recognize the challenges involved in tracking energy usage and reductions accurately across a diverse portfolio comprised of multiple property types, but their commitment to this effort is largely the reason for its success to date.

ADDITIONAL ACTIVITIES UNDERTAKEN BY PARTNERS IN 2007: CORE AND NON-CORE

Although the Energy Efficiency Goal focused on energy use in the Core portfolio, the Real Estate staff extended the focus to identify and monitor efforts on water conservation, waste management, and other environmental improvements for properties within the Core and Non-Core programs. All of the Core partners and many Non-Core partners voluntarily responded to a survey that covered green activities during 2007. Activities are summarized below.

Water Efficiency

Partners conserved water by installing low-flow and/or sensor-operated fixtures; using smart irrigation controls to adjust watering based on weather and climate; making seasonal changes to watering schedules; using drought-resistant, native plants; identifying and fixing leaks; using gray water and retention pond water for irrigation; reducing run-times of fountains; and educating tenants and residents on water conservation.

Waste Management

Partners took steps to reduce waste such as implementing and maintaining recycling programs; recycling construction and demolition waste; educating tenants and residents on recycling; holding recycling drives and events; using recycled-content paving and construction materials; and monitoring trash/recycling pick-ups for opportunities to reduce hauls.

Other

Partners took additional environmentally sensitive steps such as mitigating and treating storm water runoff, purchasing green-certified products, and using paint with lower levels of Volatile Organic Compounds (VOCs). Furthermore, some partners have investment strategies that focus on redeveloping urban infill sites near public transportation nodes, which contributes to more sustainable communities.

HINES CALPERS GREEN FUND UPDATE

In August 2006, the Hines CalPERS Green Development Fund (HCG) was created with a $225 million equity allocation from CalPERS and an additional Hines equity co-investment of $53 million. This represents approximately $725 million (gross asset value) of development projects. HCG will only develop high performance, sustainable office buildings certifiable through the Leadership in Energy and Environmental Design Core and Shell Program (LEED-CS). The fund focuses on developing office projects throughout the United States. Brief descriptions of the two projects underway are:

- Tower 333, a 20-story, 415,000 square foot office tower in downtown Bellevue, Washington is the first project completed in HCG. Tower 333 is the first building on the West Coast to receive a LEED Core and Shell pre-certification. Expedia is the major tenant. The project is open and 96 percent leased.

- Main Place, a new 46-story, 973,000 square-foot office tower in downtown Houston, Texas has recently commenced construction. The project will be an urban infill development, replacing one of the most blighted blocks in downtown with a signature high-rise office building. Main Place is LEED Silver Pre-Certified. Substantial completion is expected in first quarter 2011.

REAL ESTATE STAFF'S PARTICIPATION IN ENVIRONMENTAL WORKING GROUPS

UN Environmental Programme Finance Initiative and UN Principles for Responsible Investment (PRI)

Staff assisted in drafting the *Building Responsible Property Portfolios – A Review of Current Practice by UNEP FI and PRI Signatories* report, released earlier this year. This report helps PRI signatories understand how they can apply the Principles to property assets through Responsible Property Investing (RPI). It does so by highlighting the work of leading practitioners. The Real Estate Unit is incorporating the Principles, consistent with its fiduciary duty, through its Energy Efficiency Goal, Responsible Contractor Program policy, the California Urban Real Estate program, and the Hines CalPERS Green Fund.

United Nations' Investor Network on Climate Risk (INCR) Action Plan

In February 2008, nearly 50 leading U.S. and European institutional investors released a climate change action plan at the United Nations that will boost investments in energy efficiency and clean energy technologies and require tougher scrutiny of carbon-intensive investments that may pose long-term financial risks. Staff worked closely with the INCR to craft the goal for the real estate portion of the action plan.

The goal targets a 20 percent reduction over a three-year period in energy used in core real estate investment portfolios and the incorporation of green building standards (such as LEED and Energy Star) as a factor in making investment decisions.

CalPERS Real Estate investment partners strive to enhance sustainability across their portfolios. All partners recognize the importance of an industry shift toward environmentally sensitive real estate operations, management, and development. They recognize the challenges involved in tracking energy usage and reductions accurately across a diverse portfolio and their commitment to this effort is largely the reason for its success to date. Investment partners continue to explore and implement cost-effective strategies to achieve CalPERS environmental objectives.

GLOBAL EQUITY

EXTERNAL ENVIRONMENTAL EQUITY MANAGERS

Background

At its April 19, 2004 meeting, the Investment Committee considered environmental investing strategies, including environmentally screened public equity funds performing as well or better than their non-screened counterparts. Specifically targeted were stock portfolios in environmentally screened funds managed by leading active public equity investment managers with proven track records. At this meeting the Investment Committee voted to allow staff, in its discretion, to either: (1) hire external managers for up to $500 million total, (2) allocate up to $500 million to mutual funds that have good records, or (3) a combination thereof, to achieve the best results for the System.

Mutual funds were considered first with a Request for Information (RFI) issued in September 2004. On April 1, 2005, CalPERS invested in BGI's iShares KLD Select Social Index Fund, an Exchange Traded Fund (ETF). On May 13, 2005, a Request for Proposal (RFP) was issued to firms identified through the prior RFI search.

Five firms and six products were recommended to and approved by the Investment Committee at its November 14, 2005 meeting, creating a pool to which additional products may be added in the future. CalPERS contracted with and funded five products over the period February 1, 2006 to June 1, 2006. All of the managers have one year renewable contracts contingent upon the Investment Committee's annual approval. Each contract also contains a provision allowing for termination upon 30 days' notice.

After engaging and funding the five products mentioned above, the investment in BGI's iShares KLD Select Social Index Fund was liquidated. The last month of performance for this product was July 2006.

At the April 2007 Investment Committee meeting, the Global Equity delegation for environmental managers was changed from $500 million to a range of 0% - 0.5% of Global Equity.

Assets Under Management

As of September 30, 2008, total assets under management by the external environmental managers were $419.7 million. Table 1 shows the assets managed by each manager as of this date.

Table 1

Manager	Mandate	Portfolio Value (millions)	Portfolio Percent
Domestic Managers		$255.9	61.0%
AXA Rosenberg Investment Mgmt.	U.S.	$117.0	27.9%
New Amsterdam Partners	U.S.	$69.0	16.4%
State Street Global Advisors	U.S.	$69.9	16.7%
International Managers		$163.8	39.0%
Global Currents, LLC	Dev ex-U.S.	$65.6	15.6%
State Street Global Advisors	Dev ex-U.S.	$98.2	23.4%
Total External Environmental Equity		$419.7	100.0%

Source: State Street Bank

Program Performance

The performance objective of all environmental portfolios is to exceed the benchmark returns, net of management fees, over a full market cycle, considered to be three to five years. From inception through September 30, 2008, the program has underperformed the aggregate benchmark by 0.50%. Table 2 illustrates each manager's performance relative to its respective benchmark since the initial funding date.

Table 2

Environmental External Equity Relative Performance	Year Ending 9/30/06*	Year Ending 9/30/07	Year Ending 9/30/08	Annualized Since Inception	Inception Date
Domestic Managers					
AXA Rosenberg	(3.21%)	3.15%	0.15%	(0.12%)	4/1/06
New Amsterdam Partners	(5.66%)	(2.49%)	2.68%	(1.58%)	2/1/06
State Street Global Advisors	(0.05%)	(2.13%)	(0.77%)	(1.20%)	6/1/06
International Managers					
Global Currents, LLC	(0.93%)	(5.39%)	2.08%	(0.94%)	5/1/06
State Street Global Advisors	2.70%	2.10%	0.35%	1.78%	3/1/06
Total Environmental	**(2.11%)**	**(0.60%)**	**0.87%**	**(0.50%)**	**2/1/06**

Source: State Street Bank   Returns are net of fees and CFA compliant.
*Note: This is a partial year. The Total Environmental number includes returns from the KLD ETF liquidated at the end of July 2000.

Next Steps

When CalPERS issued its Request for Proposal for Environmental Investing in May 2005, managers were asked to submit proposals for active U.S. equity management or active international equity management. The managers that were hired are, for the most part, managers that screen out firms based on environmental criteria.

As staff has continued to monitor the evolution of environmental investing, it seems clear that many managers choose to launch global equity products instead of U.S. only or non-U.S. only. In addition, staff believes there are now more opportunities to invest with managers who are targeting investments in companies that have an advantage in adapting to, or mitigating, climate change and other environmental issues, rather than managers whose processes involve screening out companies. Therefore, staff believes that it would be worthwhile to conduct a new manager search some time in the coming fiscal year. Staff will prepare a separate agenda item on this topic for the Investment Committee's consideration at a future meeting.

In addition to external managers, staff is also looking at possible strategies that could be implemented internally. Whether staff recommends additional external or internal portfolios, it will likely be necessary to increase the Global Equity delegation to environmental strategies from the current 0% - 0.5% range. This issue will also be addressed in a future agenda item.

CORPORATE GOVERNANCE

ENVIRONMENTAL STRATEGIC PLAN

Launched in 2005 by the Investment Committee, the objective of the Corporate Governance Environmental Strategic Plan (Strategic Plan) is to improve transparency and timely disclosure of environmental data related to risks and opportunities by pursuing macro and micro initiatives so investors can make more informed investment decisions. Staff continues to implement the Investment Committee's Strategic Plan consistent with CalPERS Global Principles of Accountable Corporate Governance (Principles.) The Principles create the framework by which CalPERS executes its proxy voting responsibilities, corporate engagement initiatives, and corporate governance initiatives. Through 2008, staff has implemented the Committee's Strategic Plan to improve environmental disclosure and transparency by:

- Advocating policy reform through active leadership on boards, advisory committees, and collaborative investor coalitions.
- Encouraging and supporting global reform through legislative, regulatory, and investor forums.
- Promoting improved disclosure at individual portfolio companies through constructive engagement.
- Enhancing and executing CalPERS proxy voting responsibilities to support improved environmental disclosure consistent with the Investment Committee's Global Principles of Accountable Corporate Governance.

Board, Advisory Committee, and Investor Coalition Leadership

Through its Corporate Governance Program, CalPERS continues to implement the Committee's long-term goal of enhancing the System's leadership position in advocating for improved environmental disclosure and transparency on a global basis. This is exemplified by staff's active participation through membership on stakeholder entities, public written correspondence, and action to communicate CalPERS corporate governance perspective as an investor.

Through board, advisory committee, and working group seats, staff advocates CalPERS perspective and shapes action to improve environmental data disclosure. Staff's objective in each of these roles is to provide CalPERS perspective as an investor in integrating environmental sustainability into capital markets and incorporating environmental disclosure into investment decision-making and ownership practices. For example, corporate governance staff maintains an active dialogue and stewardship on the UN PRI in Emerging Markets Project which brings together investor signatories from around the world to discuss how environmental, social, and governance issues influence their finance, investment, and business practices, while also providing key updates on regional news and activities.

Leadership through Written Correspondence

CalPERS also regularly advocates for reform through public written correspondence to regulators and corporations addressing the improvement of corporate governance best practices through environmental data disclosure.

In June, the Securities and Exchange Commission (SEC) announced a "21st Century Disclosure Initiative" with a mission of enhancing the usefulness of environmental disclosure to investors. The Initiative will review existing disclosure, its objectives, and how disclosure may be improved using modern technology and practices. The SEC will then appoint members to an Advisory Committee, which will review the SEC's plan for the initiative, make recommendations about implementation, and consider public comment.

In a letter to the SEC dated October 22, 2008, CalPERS joined INCR signatories to emphasize the growing importance of climate risk disclosure and related issues. The letter discussed the need for interpretive guidance on climate risk disclosure and the benefits of integrating the disclosure of material environmental, social, and governance (ESG) risks into the Initiative. The letter also recommends that the SEC appoint an investment professional as member of the Advisory Committee in order to ensure that investor views on these issues are represented.

In a letter dated September 15, 2008 to Mr. Sean Dilweg, Commissioner – Wisconsin Department of Insurance and Chairman – Climate Change and Global Warming Task Force of the National Association of Insurance Commissioners (NAIC), CalPERS joined INCR signatories in expressing concern over recent attempts to weaken the NAIC proposed Climate Risk Disclosure Proposal by making key elements of the proposal non-public. Transparency and access to comparable data are important components of a free and efficient market. We share concern with the other letter signatories about the potential financial impact of climate change on the insurance sector, as well as the U.S. insurance industry’s poor record of disclosure on this issue.

In a letter dated September 8, 2008 to the SEC, CalPERS joined INCR signatories to comment on the SEC’s new proposed requirements for oil and gas reserves reporting. This letter urged the SEC to pay careful attention to the implications of climate change and carbon-related regulations before finalizing the new reserves reporting requirements. Disclosure of any estimated additional risks posed by the extraction and development of additional reserves will be important. Financial statement filers should be required to provide investors with information about the carbon content of proven, probable and potential oil reserves in their portfolio, as well as the potential liabilities posed by their continued extraction and use.

In a letter dated August 8, 2008 to the Financial Accounting Standards Board (FASB), CalPERS provided comment on proposed accounting standards that pertain to disclosure of certain loss contingencies. As an investor and provider of long-term capital, CalPERS has a great interest in the improvement of financial reporting. Through this letter, CalPERS expressed support for FASB's decision to expand the population of loss contingencies that are required to be disclosed. CalPERS agrees that enhanced disclosures about loss contingencies that are (or would be) recognized as liabilities in a statement of financial position will improve current accounting practices and provide financial statement users with relevant, timely information. CalPERS, as a long-term investor, believes that disclosing contingent liabilities such as quantifiable environmental liabilities will assist investors in assessing the likelihood, timing and amount of future cash flows association with loss contingencies.

CalPERS is also taking action to engage congressional leaders on the necessity to address the issue of climate change. For example, in a letter dated November 15, 2007 to Majority Leader Reid, Minority Leader McConnell, Speaker Pelosi, and Minority Leader Boehner, CalPERS joined twenty-nine institutional investors and asset managers with over $1.4 trillion in assets under management to urge support for a final Energy Bill that will move the United States toward a more sustainable and more secure energy future and address directly the issue of climate change. The letter calls on Congress to pass an Energy Bill that realigns national policies and incentives to stimulate the rapid deployment of clean technologies. Final legislation should include a strong renewable electricity standard, increased fuel economy standards, and energy efficiency incentives and standards.

United Nations Principles for Responsible Investment (UN PRI)

In June 2008, UN PRI signatories launched a new collaborative project to encourage listed companies on the MSCI World, FTSE All World, and S&P/IFC Emerging Markets indices that have not yet endorsed the United Nations Global Compact (UNGC) to become participants. The project is referred to as the Seoul Initiative, reflecting the fact that the initiative was launched at the annual 2008 UN PRI in Person conference in Seoul, South Korea. As environmental and social issues grow ever more relevant in business and investment terms, a company's capability in dealing with these challenges is becoming increasingly important in shaping its financial performance. The UNGC is an important tool for helping companies to achieve long-term business success while also fulfilling society's expectation that they should operate responsibly. It provides companies with a framework of widely accepted standards to use in their management of ESG issues.

The project is not "led" by an individual signatory or group of signatories; but, it has a Steering Committee composed of APG, CalPERS, New Zealand Superannuation Fund, and PGGM Investments that will guide the implementation of the initiative. As a Steering Committee member, CalPERS staff has actively participated in the development and implementation of the Seoul Initiative. The project is expected to extend over 12 months, coming to a conclusion at the 2009 UN PRI conference in Sydney, Australia. To date, 52 investor signatories representing approximately US $4.4 trillion in assets under management have agreed to endorse the Seoul Initiative Investor Letter.

Investor Network On Climate Risk (INCR)

As an INCR signatory, CalPERS is committed to managing the System's investments by engaging companies, investors, and others, and by supporting policy action consistent with fiduciary duty that addresses the risks and opportunities associated with climate change. In February 2008, CalPERS joined other INCR signatories and a dozen U.S. businesses to echo a 2007 call for:

1) A mandatory national policy to contain and reduce national greenhouse gas emissions economy-wide to levels that scientists and climate models suggest are urgently needed to avoid the worst and most costly impacts from climate change.
2) The realignment of incentives and other national policies to achieve climate objectives, including a range of energy and transportation policy measures to encourage deployment of new and existing technologies at the necessary scale.
3) Guidance from the SEC and other financial regulatory bodies to businesses and investors on what material issues related to climate change companies should disclose in their regular financial reporting, so that investors can assess more accurately the effects of climate risk and opportunity in their portfolios.

In an INCR letter dated May 20, 2008 to the Honorable Harry Reid, Majority Leader United States Senate, and the Honorable Mitch McConnell, Minority Leader United States Senate, CalPERS joined John Chiang, California State Controller, Bill Lockyer, California State Treasurer, and 47 other Treasurers, Comptrollers, institutional investors, asset managers, and venture capitalists managing collectively over $2.3 trillion to urge Congress to pass strong national climate legislation consistent with the 2007 and 2008 call for U.S. climate action. Through this letter, signatories called on Congress to set a target (60-90% cuts in greenhouse gas emissions below 1990 levels) and timetable (by 2050) to reduce emissions. CalPERS believes Federal legislation to address climate change will provide legal, regulatory, and market certainty. Such legislation will also allow for a consistent standard target range and timetable for all U.S. companies to benchmark progress, and subsequent disclosure of progress, toward addressing the risks and opportunities presented by climate change.

In addition to working through INCR, CalPERS continues to stay involved with other collaborative working groups such as those related to the Global Warming

Shareholder Campaign (GWSC.) The GWSC, which is coordinated by Ceres and the Interfaith Center on Corporate Responsibility (ICCR), aims to protect and enhance shareowner value by advocating for improved corporate and public policies on global warming. The collaborative working groups continue to evolve with staff currently monitoring opportunities to either establish a leadership role or join other investors to promote environmental disclosure initiatives in the following GWSC groups:

- Auto Working Group: Objective is to develop a climate change disclosure framework for the auto sector.
- Oil Working Group: Objective is to further develop investor strategies to mitigate the unique environmental and social risks associated with oil sands development.
- Agricultural Working Group: Objective is to develop key performance indicators for use by commodity brokers and food manufacturers for their entire supply chains on green-house-gas emissions, and water and energy efficiency/conservation.

Targeted Company Initiatives: Carbon Disclosure Project (CDP)

The Corporate Governance Environmental Strategic Plan (Strategic Plan) directs staff to take a more focused role in targeting individual companies for the purpose of encouraging meaningful, consistent and robust reporting; such disclosure as needed to support long-term risk assessment by investors. Staff continues to implement company specific initiatives to promote and encourage improved environmental disclosure through constructive engagement.

In 2008, staff implemented a company specific engagement strategy developed to meet the Investment Committee’s expectations of supporting the CDP as a signatory, actively promoting environmental data transparency and disclosure, and engaging individual companies in the airline, auto, utilities, and oil and gas industries. CDP is an independent not-for-profit global organization whose goal is to facilitate a dialogue between companies and investors to encourage corporate disclosure of information related to climate change. CDP provides a global framework and standard for disclosing information regarding each company’s environmental impact. This includes sending an annual questionnaire to companies, on behalf of institutional investors, requesting and compiling information on the business implications of climate change, the companies’ greenhouse gas emissions, and business risks associated with climate change. In 2007, more than 1,300 companies in developed and emerging markets (77% FTSE Global 500 - FTSE Global Equity Index Series) responded to the CDP questionnaire.

The objective of the 2008 company specific engagement strategy is to improve corporate disclosure of environmental data by increasing the number of companies responding to the CDP. Success will be measured and determined by those companies that CalPERS has engaged, as not responding to the CDP questionnaire, that complete this standard of environmental disclosure within 12 months of CalPERS initial engagement. In a letter dated October 10, 2008, CalPERS initiated its constructive engagement strategy focusing on fifty-six companies in nineteen countries where CalPERS has a share ownership interest that have chosen not to respond to the CDP questionnaire distributed earlier in the spring of this year. The objective of CalPERS company specific engagement strategy is to communicate CalPERS perspective on the importance of environmental disclosure to shareowners, notify each of the fifty-six companies that they are currently identified as a non-responsive company to CDP, and request each of the companies to respond to the CDP questionnaire. Follow up and engagement activities are currently under consideration.

Targeted Company Initiatives: Proxy Voting

Staff continues to implement company specific initiatives to promote and encourage improved environmental disclosure through CalPERS Proxy Voting Program. Staff effectively executed CalPERS proxy voting responsibilities in 2008 to support improved environmental disclosure consistent with the Investment Committee's enhanced Global Principles of Accountable Corporate Governance. For example, CalPERS Principles provided the foundation to support approximately 225 shareowner proposals seeking improved environmental reporting or disclosure from January through October 2008.

In 2008, the Investment Committee enhanced CalPERS Principles by adding reference to the 14-point Ceres Climate Change Governance Checklist. CalPERS specific principle related to environmental disclosure now reads:

> To ensure sustainable long-term returns, companies should provide accurate and timely disclosure of environmental risks and opportunities through adoption of policies or objectives, such as those associated with climate change. Companies should apply the Global Framework for Climate Risk Disclosure when providing such disclosure. The 14 point Ceres Climate Change Governance Checklist is recommended as a tool by companies to assist in the application of the Global Framework for Climate Risk Disclosure (Attachment 2).

Next Steps

Staff is continuing to explore ways through CalPERS Corporate Governance Program in which transparency and timely disclosure of environmental data related to risks and opportunities can be improved so investors can make more informed investment decisions. Going forward, actions to support CalPERS leadership in advocating for improved and timely environmental disclosure could include increased collaboration with other asset classes, as well as with other investors. Staff continues to explore these opportunities.

PRIVATE EQUITY

CalPERS established the AIM Clean Energy and Technology Program in 2004. The first investments were made in 2005. As of June 30, 2008, AIM had $1.1 billion in total exposure to the clean energy and technology sector. This $1.1 billion of exposure consists of the following:

- $200 million allocation to the Environmental Technology Program (Phase 1) authorized in 2004
- $400 million allocation to the Clean Energy and Technology Program (Phase 2) authorized in 2006
- $500 million in additional exposure through core general partner relationships

A complete review of AIM's environmental investment programs (Phase 1 and Phase 2) is contained in Attachment 3. Note, Phase 1 and Phase 2 represent specific programs created by CalPERS, whereas item 3 above represents exposure to the sector through core partnerships in the AIM portfolio.

In March 2004, the Investment Committee approved an allocation of $200 million to create the CalPERS AIM Environmental Technology Program (Phase 1). The primary objective of the program was to generate an appropriate, long-term risk-adjusted return and, as an ancillary benefit, to help create a cleaner, more sustainable environment by investing in products and concepts that are less polluting and more efficient. PCG Asset Management (PCG) was selected as a consultant to the program. The $200 million was committed to seven funds over the course of two years.

As a continuation of this investment strategy, AIM committed a further $400 million in September 2006 (Phase 2) through the creation of a new investment vehicle. The creation of this new program was discussed with the Investment Committee at the September 2006 Investment Committee meeting.

The new vehicle invests in clean energy and technology funds and also invests directly into companies through co-investments alongside general partners. The vehicle is managed by PCG and is structured to allow other institutional investors to invest alongside CalPERS. To date, New York City Retirement Systems has committed $200 million to the vehicle. CalPERS has the ability to invest additional capital alongside the vehicle on an opportunistic basis. To date, the vehicle has committed $280 million to eight funds and six co-investments.

An important and innovative element of these programs is the process that CalPERS implemented to measure and report the ancillary benefits of the underlying investments including, carbon emission reductions, electricity savings, and job creation. Environmental Capital Group (ECG) was retained to monitor and report this information. A summary of these ancillary benefits is reflected in select slides in Attachment 3. Further detailed information on the ancillary benefits is contained in the 2007 Environmental Measurement Results report which will be made available at the Investment Committee meeting.

Between Phase 1 and Phase 2, AIM now has investments in 112 companies ranging from early stage venture capital to later stage buy-outs (projects) across the United States and Europe in a number of clean technology industry sub-sectors.

While the investments are relatively young they are showing signs of satisfactory performance. Furthermore, the investments appear to be resulting in measurable ancillary benefits, including savings in energy and water, reductions in carbon emissions, and job creation.

INFLATION LINKED ASSET CLASS

Infrastructure Investment Policy

On August 18, 2008, the Investment Committee adopted an investment policy to guide its investments in infrastructure including transportation, ports, energy, water, and communications projects. On the subject of renewable energy and sustainability, the following language was included in the policy:

> CalPERS encourages the prudent use of sustainable development methods and operational practices when reasonable and economically feasible. Consideration shall be given to the use of renewable energy technologies, recycled and renewable building materials, air and water conservation technologies and practices, and efficient waste, recycle and disposal technology and practices. Consideration shall also be given to the environmental sustainability of investments including but not limited to energy efficiency, fuel economy, alternative energy generation and distribution impacts.

V. STRATEGIC PLAN:

The environmental initiatives outlined in this item fit with the CalPERS Strategic Goal IX which sets out to achieve long term, sustainable, risk adjusted returns.

VI. RESULTS/COSTS:

This is an informational item and therefore has no associated costs.

Eric Baggesen
Senior Investment Officer
Global Equity

Theodore Eliopoulos
Senior Investment Officer
Real Estate

Leon G. Shahinian
Senior Investment Officer
AIM

Anne Stausboll
Interim Chief Investment Officer